

CASE STUDY

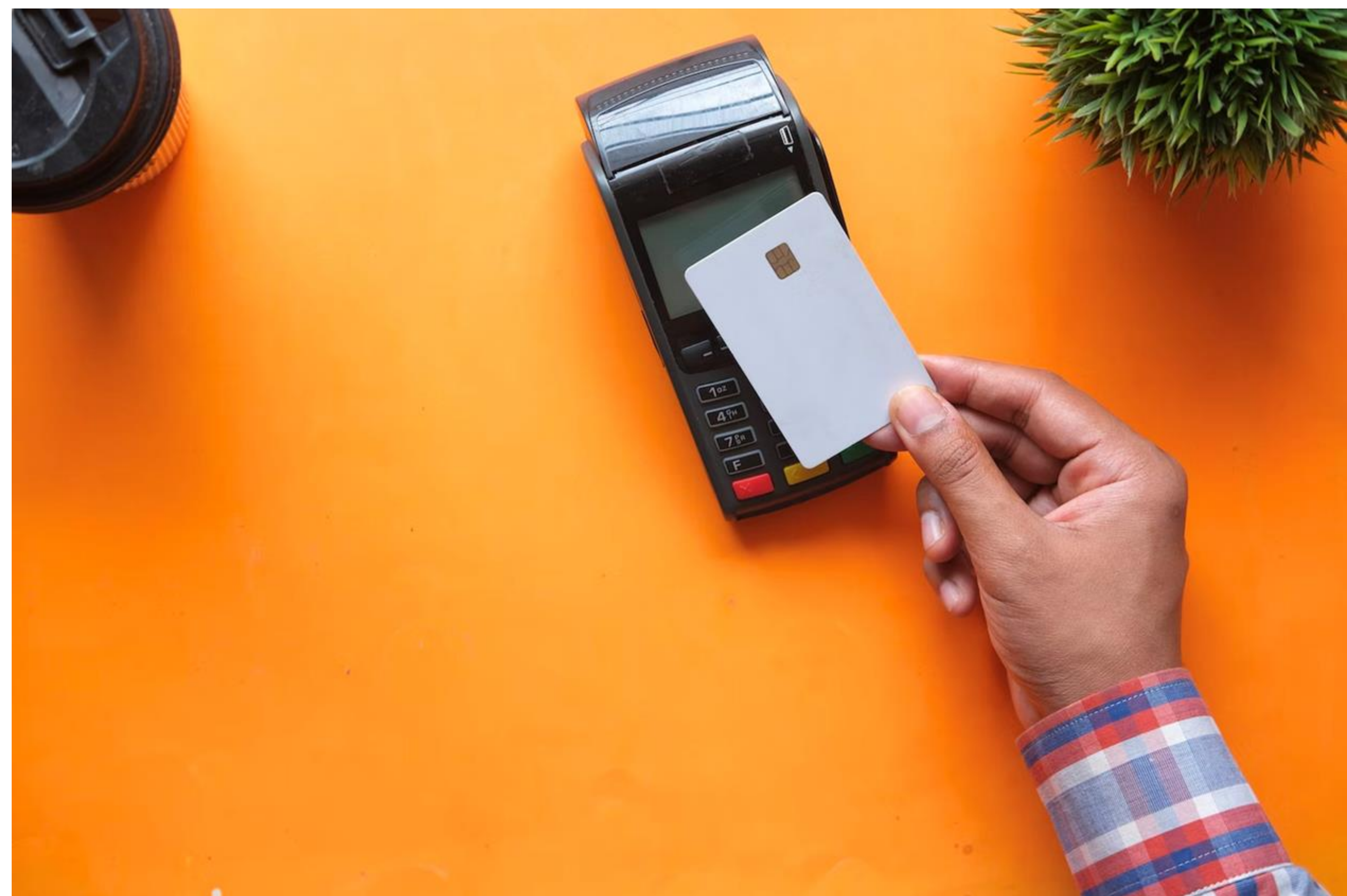
The POS that makes it all possible

card, crypto, and digital payments

Evolt worked on creating a POS suitable for all types of payments: card, crypto, and digital payments (Alipay, WeChat, Apply pay, Google Pay, etc.).

High-quality implementation on the crypto POS comes from our strong skill set in payments and payments infrastructure. Besides working on POS that supports crypto payment, our team delivered a regular payment system. The primary purpose of any POS system is to automate and simplify workflows, such as the movement of goods from receipt to sale to the customer or customer service.

Evolt's team worked on POS acceptance of the payments, stock and purchasing management, loyalty, and personal control. And has experience with cloud-based POS solutions, mobile POS systems, and costume POS systems.



The Challenge

The client approached us with a request to help them build a POS that can process regular payments and, in addition to their service offering, crypto, and digital prices, secure better service for their end-users (merchants).

The goals were to enable the following:

- Enabling a straightforward process for card and digital payments.
- Chip and pin card contactless and third-party integrations.
- End-users have the easiest and quickest possibility to exchange supported cryptocurrencies for local currency.
- To enable payments for products or services in crypto calculated by the current market price of the currency in use.

Merchant have the possibility to generate additional income by providing crypto exchange services



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For card and digital payments, we worked on direct integrations with third-party providers, which required PCI DSS compliance. And the biggest focus was put on the crypto side of the project, which had multiple challenges. For the client, it was essential to secure a simple flow of payments was essential, mainly focusing on crypto payments to mitigate risks in implementing the “buy and sell” crypto.

The hardware of a POS is an Android device that enables end-users (merchants) to:

- **Accept crypto payments at their locations and subsequently receive a settlement in fiat on their IBAN**
- **Perform as a point for selling cryptocurrencies at their physical location**
- **Perform as a point for buying cryptocurrencies at their physical location**

Each POS hardware has a predefined merchant account on the merchant side. During activation, each POS is assigned a unique hardware identifier locked to the merchants' account. The merchant account admin has the right to add or remove hardware POS users on the merchant side. An unlimited number of users can be added to the hardware POS.

When adding a new hardware POS user on the merchant side, the following data needs to be collected:

- **name of a new user**
- **the surname of a new user**
- **the fingerprint of a new user**

User data (name, surname, fingerprint) are encrypted locally on each hardware POS device, while all the other administrative and sensitive data is fetched over the wire.

SECURITY MEASURES

- Proprietary hardware locking algorithm and request validation protocol over HTTP
- Combining OCR with analytics to verify identity with 99% accuracy for the KYC process
- High-speed transaction processing engine for near real-time response and rate calculation
- Proprietary scheme for encryption of sensitive data at rest and in transit

All added users could access the hardware POS home screen by logging into the device with their fingerprint. Home screen has three modules (*each starting one of the main three hardware POS flows*):

- 1) **Crypto payments**
- 2) **Crypto buy and sell**





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1) Crypto payments

The payment was designed to be user-friendly and straightforward. When a consumer has to make a payment, an interface is displayed where the merchant may enter the required sum, and from that, a QR code is generated. The customer must scan this code before the information is displayed on the POS, and a receipt is issued following the customer's confirmation of the payment. A validation message warning of an expired payment occurs if the user takes too long to confirm, and the procedure must be redone.



1) Crypto buy and sell

After the merchant selects a crypto to buy, customers can choose to buy one of the enabled cryptocurrencies. The currencies that the user can buy can be predefined. This is valid for both crypto and FIAT. The estimated value for all cryptocurrencies is displayed underneath in local currency. For calculating the estimated value, we use market price.



When choosing cryptocurrency, the merchant is informed that the customer needs to be identified by scanning their ID card or passport. This step is obligatory each time when a customer wants to buy crypto to check if the customer is already in the provider's KYC database or if the KYC needs to be conducted. This was also one of the challenging parts of the project, where we needed to secure verification of identity in the digital world through Comprehensive Identity Verification and Compliance at a Fraction of the Cost.



The Impact

KEY STATS

100+ locations use this POS

20% increased the efficiency of merchants' reporting process

Simplified and centralized workflow of the crypto payment process

Creating additional **revenue streams for merchants**

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“A robust congratulations to the team at Evolt for a job well done. We've been trying to put together a functional solution for a long period. We finally hired the Evolt team, who worked closely with us throughout the process, staying on task, on target, and on budget. Working with a team with great tech talent, experience, and understanding of the newest technology and trends, such as Web 3.0 space and blockchain, is amazing and inspiring. I also appreciate their quick and courteous responses. I highly recommend their service!”

Dejan Roljic

Founder and CEO



Evolt d.o.o.

Evolt is a global technology-agnostic house delivering cutting-edge solutions, products, and transformations.

We provide support to our clients wherever they may be on their journey. From early-stage strategy and technology way-finding to digital product creation,

Let's solve your pain points and evolve your projects!

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